PTO
JUL 13 2004
JC42
PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Yasutomo YAMAMOTO, et al.

Serial No.: 10/683,688

Filed: October 9, 2003

For: STORAGE SYSTEM THAT IS CONNECTED TO EXTERNAL STORAGE

Art Unit: 2818

Examiner: To Be Assigned

Confirmation No. 9917

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450, on
07/09/04
Date of Deposit
Kimberly Yee
Name
Kimberly Yee 07/09/04
Signature Date

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

1. ☒ The information disclosure statement submitted herewith is being filed within three months of the filing date of the application other than a continued prosecution application, or within three months of the date of entry into the national stage of an international application, or before the mailing date of a first Office Action on the merits, or before the mailing of a first Office action after the filing of a request for continued examination under §1.114, whichever event occurs last. 37 C.F.R. §1.97(b).

2. ☐ The information disclosure statement transmitted herewith is being filed *after* the period specified in §1.97(b), but *before* the mailing date of a final action under §1.113, or a notice of allowance under §1.311, or an action that otherwise closes prosecution in the application, whichever occurs first. A statement specified in §1.97(e) or a fee set forth in §1.17(p) is included. 37 C.F.R. §1.97(c).

§1.97(e) STATEMENT

I, the person signing below, state:

☐ that each item of information contained in the information disclosure statement was first cited in the attached communication from a foreign patent office in a counterpart foreign application and that the communication is dated not more than three months prior to the filing of the statement. 37 C.F.R. §1.97(e)(1).

OR

☐ that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of the statement. 37 C.F.R. §1.97(e)(2).

OR FEE

☐ Attached is a fee set forth in 37 C.F.R. §1.17(p) for submission of an information disclosure statement under §1.97(c). ($180.00). A copy of this petition is enclosed.

3. ☐ The information disclosure statement transmitted herewith is being filed *after* the period specified in §1.97(c), but before, or simultaneously with the payment of the issue fee. A statement specified in §1.97(e) and a fee set forth in §1.17(p) are included. 37 C.F.R. §1.97(d).

§1.97(e) STATEMENT

I, the person signing below, state:

☐ that each item of information contained in the information disclosure statement was first cited in the attached communication from a foreign patent office in a counterpart foreign application and that the communication is dated not more than three months prior to the filing of the statement. 37 C.F.R. §1.97(e)(1).

OR

☐ that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of the statement. 37 C.F.R. §1.97(e)(2).

AND FEE

☐ Attached is a fee set forth in 37 C.F.R. §1.17(p) for submission of an information disclosure statement under §1.97(d). ($180.00).

4. ☒ If it should be determined that for any reason either an insufficient fee or an excessive has been paid, please charge any insufficiency or credit any overpayment necessary to ensure consideration of the information disclosure statement for the above-identified application to Deposit Account No. 50-1314. **A copy of this petition is enclosed.**

5. ☒ A list of 3 reference(s) is in the enclosed Form PTO-1449. Pursuant to 37 C.F.R. § 1.98(a) (2) (i), copies of the listed U.S. references are not provided since the requirement has been waived for U.S. patent applications filed after June 30, 2003.

NON-ENGLISH LANGUAGE REFERENCES

☐ Enclosed is a search report for a counterpart application. The search report Examiner has provided comments on the relevancy of any non-English language references cited in the search report.

☐ The specification incorporates comments on the relevancy of Non-English language references.

☐ Set forth below are comments provided by the applicant's home country counsel on the relevancy of non-English language references: N/A

Respectfully submitted,

HOGAN & HARTSON L.L.P.

By: _____
Ying Chen
Registration No. 50,193
Attorneys for Applicants

Date: July 9, 2004

Biltmore Tower
500 South Grand Avenue, Suite 1900
Los Angeles, CA 90071
Telephone: (213) 337-6700
Facsimile: (213) 337-6701

FORM PTO-1449	Docket Number (Optional) 81940.0063	Application Number 10/683,688
INFORMATION DISCLOSURE CITATION IN AN APPLICATION *(Use several sheets if necessary)*	Applicant: Yasutomo Yamamoto, et al.	
	Filing Date: October 9, 2003	Group Art Unit: 2818

JC12 PATENT & TRADEMARK OFFICE JUL 13 2004

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,356,977	03/12/02	Ofek et al.			
	2003/0204683	10/30/03	Okumoto et al.			
	2003/0221077	11/27/03	Ohno et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES	Translation NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

LACASSE & ASSOCIATES, LLC

PROFESSIONAL PATENT SERVICES
1725 Duke Street, Suite 650
Alexandria, Virginia 22314
Telephone (703) 838-7683
Facsimile (703) 838-7684
e-mail: patserv@lacasse-patents.com
Writer's e-mail:<last name>@lacasse-patents.com

Director
Randy W[illegible]sse*

Associate Director
Ram Soundararajan*

Patent Research
Jerry R. Lacasse
Nidhi Chotani
William C. McBeth
Iuliana Tanase
Sejal Gangar
Ben Aghdasi, Ph.D.
Danielle C. Williams

Technical Advisors
Mary O. Stauss, Ph.D.
Martin Moynihan
Ronald J. Bruniger

Patent Prosecution
Jaclyn A. Schade*
Thien Tran*
Monica Ullagaddi
Ben Aghdasi, Ph.D.
Elizabeth A. Hein‡
Brandi L. Franklin

IP Document Services
Larry J. Hecker†
Brian G. Willingham‡
Andrew K. Kamara

Patent Services
LaRieko Welch†
Terry L. Lacasse

*Registered Patent Agent
†Manager
‡Assistant Manager

May 27, 2004

Via Federal Express
Noboru Otsuka
Hitachi, Ltd.
IP Development & Management Division
Patent Dept. 4
292, Yoshida-cho, Totsuka, Yokohama-shi
Kanagawa, Japan 244-0817

HHH
81940.0063
YAMAMOTO
10/683,688

RE: PATENTABILITY SEARCH FOR STORAGE SYSTEM THAT IS CONNECTED TO EXTERNAL STORAGE
Your File: 340300199US01
Our Docket: PSP-1041421

Dear Ms. Otsuka:

In accordance with your request, we have conducted a patentability search on the above-identified subject matter.

Enclosed with this report are copies of the search results and your disclosure materials. If after reviewing the results, you feel that the search feature (or specific search elements), the field of search, or results are not commensurate with your original request, or you would like to extend the search into additional areas, please contact us.

Sincerely,

Ram Soundararajan
Ram Soundararajan

Enclosures
RS:WCM:dcw:eah
s04/psp1041421

BEST AVAILABLE COPY

CONFIDENTIAL
(Patentability Search)

I. SEARCH FEATURE

A. General

Data storage and retrieval

B. Specific

A second storage system that is connected to a computer and a first storage system including a first storage device, the second storage device comprising:

a first control section that is connected to the computer;

a second control section that includes a second storage device that stores data to be used by the computer and a cache memory, and control an input/output of data to the second storage device and the cache memory;

a third control section that is connected to the first storage system; and

an internal network that mutually connects the first control section, second control section and the third control section, wherein the first control section receives from the computer a first input/output request having first identification information indicative of a storage device to be accessed, and selects one of the second control section and the third control section to which a second input/output request based on the first identification information is sent.

C. Application

Devices of another storage system are provided to a host computer as devices of a second storage system

BEST AVAILABLE COPY

II. FIELD OF SEARCH

The search of the above features was conducted in the following areas:

A. Classification search

Class	Subclasses	Description
707		**DATA PROCESSING: DATABASE AND FILE MANAGEMENT OR DATA STRUCTURES**
	1	DATABASE OR FILE ACCESSING
	10	. Distributed or remote access
709		**ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTIPLE COMPUTER OR PROCESS COORDINATING**
	200	MULTICOMPUTER DATA TRANSFERRING
	213	. Multicomputer data transferring via shared memory
	214	.. Plural shared memories
	216	.. Accessing another computer's memory

The above subclasses represent areas deemed to contain subject matter of interest to one or more of the search features. Please note that relevant references may be classified outside of these areas. The integrity of the search is based on the records as presented to us by the United States Patent and Trademark Office (USPTO). No further integrity studies were performed. Also a key word search was performed on the USPTO full-text database including published U.S. patent applications.

III. RESULTS OF SEARCH

A. References developed as a result of search (related art is in boldface):

U.S. Patent No.	Inventor
6,356,977 B2	**Ofek et al.**

U.S. Patent Application Publication No.	Inventor
2003/0204683 A1	**Okumoto et al.**
2003/0221077 A1	**Ohno et al.**

BEST AVAILABLE CO[illegible]